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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/516,881

Applicant(s)

NAKO, KAZUYUKI

Examiner

Mahesh H. Dwivedi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 0204 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/02/2006 has been entered.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Response to Amendment

3. Receipt of Applicant's Amendment, filed on 05/29/2007, is acknowledged. The amendment includes the addition of claim 13, and the amending of claims 1-12.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the examiner points to "standardized" and "non-standardized" as being indefinite because there is no definition nor explanation of what "standardized" and "non-standardized" represent.

Claim 13 is rejected for incorporating the deficiencies of independent claim 1.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-2, 6-8, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hyon** (U.S. PGPUB 2002/0077135) and in view of **Baker** (U.S. Patent 6,546,417).

8. Regarding claim 1, **Hyon** teaches a display device comprising:

A) a first storage portion for storing beforehand a standardized character code for specifying each standardized character (Paragraphs 23, and 41-42, Figure 4);

B) a second storage portion for storing a non-standardized image code for specifying said non-standardized image and non-standardized image data corresponding to said non-standardized image code in a correlated manner, said non-standardized image being generated by a user (Paragraphs 23, 25, and 44, Figure 2);

C) a display output portion for outputting said standardized character and said non-standardized image (Paragraph 21, Figure 2); and

D) a display control portion for causing said display output portion to output corresponding said standardized character and said non-standardized image based on display data containing a series of said standardized character code, text attribute data, and said non-standardized image code (Paragraphs 21 and 42);

The examiner notes that **Hyon** teaches “a first storage portion for storing beforehand a standardized character code for specifying each standardized character” as “A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons” (Paragraph 23) and “the user can input a text including typical characters, special characters, or emoticons within the range of a transmittable SMS message, by changing input modes” (Paragraph 41). The examiner further notes that **Hyon** teaches “a second storage portion for storing a non-standardized image code for specifying said non-standardized image and non-standardized image

data corresponding to said non-standardized image code in a correlated manner, said non-standardized image being generated by a user as “A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons” (Paragraph 23), “storage 18 stores oriental or occidental emoticons according to the cultural area of a user” (Paragraph 25), and “A plurality of emoticons are pre-stored in a mobile terminal so that a user easily select an intended emoticon in the present invention. In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station and the stores them, or downloads them from the Internet. The user can change and edit the emoticons stored in the mobile terminal” (Paragraph 44). The examiner further notes that it is clear that the emoticons which are edited, changed, and user-generated must be stored in the RAM of storage 18 since items stored in RAM can be written to whereas items stored in ROM cannot be written (i.e. are Read-Only). The examiner further notes that Hyon teaches “**a display output portion for outputting said standardized character and said non-standardized image**” as “a display 16 outputs display data and text messages generated in the mobile terminal. An LCD (Liquid Crystal Display) can be used as the display 16” (Paragraph 21). The examiner further notes that Hyon teaches “**a display control portion for causing said display output portion to output corresponding said standardized character and said non-standardized image based on display data containing a series of said standardized character code, text attribute data, and said non-standardized image code**” as “a display 16 outputs display data and text messages generated in the mobile terminal. An LCD (Liquid Crystal Display) can be used as the display 16” (Paragraph 21) and “After an intended text is completed, the user instructs the mobile terminal to transmit the SMS message including the emoticon...the mobile terminal transmits the stored message” (Paragraph 42). The

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examiner further notes that it is common knowledge that when text messages are received via a device, the entire message is displayed at once.

Hyon does not explicitly teach:

E) said display control portion having image transforming means for transforming said non-standardized image to be displayed according to said text attribute data.

Baker, however, teaches “**said display control portion having image transforming means for transforming said non-standardized image to be displayed according to said text attribute data**” as “in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided...at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size” (Column 8, lines 26-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Baker’s** would have allowed **Hyon’s** to provide a method for allowing for scalable icons to accompany texts with specified and varied fonts in order to easily associate an icon to a particular sentence, as noted by **Baker** (Column 5, lines 40-55).

Regarding claim 2, **Hyon** does not explicitly teach a display device comprising:

A) wherein said text attribute data contains size attribute data indicating a character size of the corresponding standardized character; and

B) said image transforming means scales up/down said non-standardized image according to said size attribute data.

Baker, however, teaches “**wherein said text attribute data contains size attribute data indicating a character size of the corresponding standardized character**” as “in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided...at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size” (Column 8, lines 26-40) and “**said image transforming means scales up/down said non-**

standardized image according to said size attribute data” as “in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided...at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size” (Column 8, lines 26-40)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Baker's** would have allowed **Hyon's** to provide a method for allowing for scalable icons to accompany texts with specified and varied fonts in order to easily associate an icon to a particular sentence, as noted by **Baker** (Column 5, lines 40-55).

Regarding claim 6, **Hyon** teaches a method comprising:

A) storing a non-standardized image code for specifying said non-standardized image and non-standardized image data corresponding to said non-standardized image code (Paragraphs 23, 25, and 44, Figure 2);

B) said non-standardized image being generated by a user and stored in a storage portion different from a storage portion of storing the standardized character (Paragraphs 23 and 44);

D) displaying said standardized character and said non-standardized image simultaneously based on said transformed non-standardized image (Paragraphs 21 and 42).

The examiner notes that **Hyon** teaches “**storing a non-standardized image code for specifying said non-standardized image and non-standardized image data corresponding to said non-standardized image code**” as “A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons” (Paragraph 23), “storage 18 stores oriental or occidental emoticons according to the cultural area of a

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user" (Paragraph 25), and "A plurality of emoticons are pre-stored in a mobile terminal so that a user easily select an intended emoticon in the present invention. In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station and the stores them, or downloads them from the Internet. The user can change and edit the emoticons stored in the mobile terminal" (Paragraph 44). The examiner further notes that Hyon teaches "said non-standardized image being generated by a user and stored in a storage portion different from a storage portion of storing the standardized character" as "A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons" (Paragraph 23) and "In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station, and the stores them, or downloads them from the Internet" (Paragraph 44). The examiner further notes that it is clear that the emoticons which are edited, changed, and user-generated must be stored in the RAM of storage 18 since items stored in RAM can be written to whereas items stored in ROM cannot be written (i.e. are Read-Only). The examiner further notes that items which are clearly not edited/changed/manipulated (i.e. text characters) would be stored in ROM of storage 18. Moreover, the examiner further wishes to state that it is well known that text characters from a particular font are stored in ROM and not RAM (see cited reference of Hersum (see column 4, lines 55-67 for reference). The examiner further notes that Hyon teaches "displaying said standardized character and said non-standardized image simultaneously based on said transformed non-standardized image" as "a display 16 outputs display data and text messages generated in the mobile terminal. An LCD (Liquid Crystal Display) can be used as the display 16" (Paragraph 21) and "After an intended text is completed, the user instructs

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the mobile terminal to transmit the SMS message including the emoticon...the mobile terminal transmits the stored message" (Paragraph 42). The examiner further notes that it is common knowledge that when text messages are received via a device, the entire message is displayed at once.

Hyon does not explicitly teach:

C) with respect to display data containing a series of a standardized character code, text attribute data, and said non-standardized image code, transforming said non-standardized image to be displayed according to said text attribute data.

Baker, however, teaches "**with respect to display data containing a series of a standardized character code, text attribute data, and said non-standardized image code, transforming said non-standardized image to be displayed according to said text attribute data**" as "in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided...at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size" (Column 8, lines 26-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Baker's** would have allowed **Hyon's** to provide a method for allowing for scalable icons to accompany texts with specified and varied fonts in order to easily associate an icon to a particular sentence, as noted by **Baker** (Column 5, lines 40-55).

Regarding claim 7, **Hyon** teaches a viewer program comprising:

A) storing a non-standardized image code for specifying said non-standardized image and non-standardized image data corresponding to said non-standardized image code (Paragraphs 23, 25, and 44, Figure 2);

B) said non-standardized image being generated by a user and stored in a storage portion different from a storage portion for storing the standardized character (Paragraphs 23 and 44); and

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D) displaying said standardized character and said non-standardized image simultaneously based on said transformed non-standardized image (Paragraphs 21 and 42).

The examiner notes that Hyon teaches **“storing a non-standardized image code for specifying said non-standardized image and non-standardized image data corresponding to said non-standardized image code”** as “A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons” (Paragraph 23), “storage 18 stores oriental or occidental emoticons according to the cultural area of a user” (Paragraph 25), and “A plurality of emoticons are pre-stored in a mobile terminal so that a user easily select an intended emoticon in the present invention. In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station and the stores them, or downloads them from the Internet. The user can change and edit the emoticons stored in the mobile terminal” (Paragraph 44). The examiner further notes that Hyon teaches **“said non-standardized image being generated by a user and stored in a storage portion different from a storage portion for storing the standardized character”** as “A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons” (Paragraph 23) and “In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station, and the stores them, or downloads them from the Internet” (Paragraph 44). The examiner further notes that it is

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clear that the emoticons which are edited, changed, and user-generated must be stored in the RAM of storage 18 since items stored in RAM can be written to whereas items stored in ROM cannot be written (i.e. are Read-Only). The examiner further notes that items which are clearly not edited/changed/manipulated (i.e. text characters) would be stored in ROM of storage 18. Moreover, the examiner further wishes to state that it is well known that text characters from a particular font are stored in ROM and not RAM (see cited reference of **Hersum** (see column 4, lines 55-67 for reference). The examiner further notes that **Hyon** teaches **“displaying said standardized character and said non-standardized image simultaneously based on said transformed non-standardized image”** as “a display 16 outputs display data and text messages generated in the mobile terminal. An LCD (Liquid Crystal Display) can be used as the display 16” (Paragraph 21) and “After an intended text is completed, the user instructs the mobile terminal to transmit the SMS message including the emoticon...the mobile terminal transmits the stored message” (Paragraph 42). The examiner further notes that it is common knowledge that when text messages are received via a device, the entire message is displayed at once.

Hyon does not explicitly teach:

C) with respect to display data containing a series of a standardized character code, text attribute data, and said non-standardized image code, transforming said non-standardized image to be displayed according to said text attribute data.

Baker, however, teaches **“with respect to display data containing a series of a standardized character code, text attribute data, and said non-standardized image code, transforming said non-standardized image to be displayed according to said text attribute data”** as “in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided...at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size” (Column 8, lines 26-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching

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Baker's would have allowed **Hyon's** to provide a method for allowing for scalable icons to accompany texts with specified and varied fonts in order to easily associate an icon to a particular sentence, as noted by **Baker** (Column 5, lines 40-55).

Regarding claim 8, **Hyon** teaches a computer readable recording medium comprising:

A) storing a non-standardized image code for specifying said non-standardized image and non-standardized image data corresponding to said non-standardized image code (Paragraphs 23, 25, and 44, Figure 2);

B) said standardized image being generated by a user and store din a storage portion different from a storage portion for storing the standardized character (Paragraphs 23 and 44); and

D) displaying said standardized character and said non-standardized image simultaneously based on said transformed non-standardized image (Paragraphs 21 and 42).

The examiner notes that **Hyon** teaches "**storing a non-standardized image code for specifying said non-standardized image and non-standardized image data corresponding to said non-standardized image code**" as "'A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons" (Paragraph 23), "storage 18 stores oriental or occidental emoticons according to the cultural area of a user" (Paragraph 25), and "A plurality of emoticons are pre-stored in a mobile terminal so that a user easily select an intended emoticon in the present invention. In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station and the stores them, or downloads them from the Internet. The user can change and edit the emoticons stored in the mobile terminal"

(Paragraph 44). The examiner further notes that Hyon teaches **“said standardized image being generated by a user and store din a storage portion different from a storage portion for storing the standardized character”** as “A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons” (Paragraph 23) and “In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station, and the stores them, or downloads them from the Internet” (Paragraph 44). The examiner further notes that it is clear that the emoticons which are edited, changed, and user-generated must be stored in the RAM of storage 18 since items stored in RAM can be written to whereas items stored in ROM cannot be written (i.e. are Read-Only). The examiner further notes that items which are clearly not edited/changed/manipulated (i.e. text characters) would be stored in ROM of storage 18. Moreover, the examiner further wishes to state that it is well known that text characters from a particular font are stored in ROM and not RAM (see cited reference of **Hersum** (see column 4, lines 55-67 for reference). The examiner further notes that Hyon teaches **“displaying said standardized character and said non-standardized image simultaneously based on said transformed non-standardized image”** as “a display 16 outputs display data and text messages generated in the mobile terminal. An LCD (Liquid Crystal Display) can be used as the display 16” (Paragraph 21) and “After an intended text is completed, the user instructs the mobile terminal to transmit the SMS message including the emoticon...the mobile terminal transmits the stored message” (Paragraph 42). The examiner further notes that it is common knowledge that when text messages are received via a device, the entire message is displayed at once.

Hyon does not explicitly teach:

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C) with respect to display data containing a series of a standardized character code, text attribute data, and said non-standardized image code, transforming said non-standardized image to be displayed according to said text attribute data.

Baker, however, teaches “**with respect to display data containing a series of a standardized character code, text attribute data, and said non-standardized image code, transforming said non-standardized image to be displayed according to said text attribute data**” as “in order to accommodate the use of different size fonts in the mailbox display, means for scaling the size of the icon graphics are also provided...at least one image for each icon is stored, the icon most closely matching the point size of the font is chosen and then scaled as needed to better match the font point size” (Column 8, lines 26-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Baker’s** would have allowed **Hyon’s** to provide a method for allowing for scalable icons to accompany texts with specified and varied fonts in order to easily associate an icon to a particular sentence, as noted by **Baker** (Column 5, lines 40-55).

Regarding claim 13, **Hyon** further teaches a display device comprising:

- A) wherein the first storage portion is a ROM (Paragraph 23); and
- B) the second storage portion is a RAM (Paragraphs 23 and 44).

The examiner notes that **Hyon** teaches “**wherein the first storage portion is a ROM**” as “A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons” (Paragraph 23). The examiner further notes that items which are clearly not edited/changed/manipulated (i.e. text characters) would be stored in ROM of storage 18. Moreover, the examiner further wishes to state that it is well known that text characters from a particular font are stored in ROM and not RAM (see cited

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reference of **Hersum** (see column 4, lines 55-67 for reference). The examiner further notes that **Hyon** teaches **"the second storage portion is a RAM"** as "A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons" (Paragraph 23) and "A plurality of emoticons are pre-stored in a mobile terminal so that a user easily select an intended emoticon in the present invention. In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station and the stores them, or downloads them from the Internet. The user can change and edit the emoticons stored in the mobile terminal" (Paragraph 44). The examiner further notes that it is clear that the emoticons which are edited, changed, and user-generated must be stored in the RAM of storage 18 since items stored in RAM can be written to whereas items stored in ROM cannot be written (i.e. are Read-Only).

9. Claims 3-5, and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hyon** (U.S. PGPUB 2002/0077135) and in view of **Baker** (U.S. Patent 6,546,417) as applied to claims 1-2, 6-8, and 13 and further in view of **Ostermann et al.** (U.S. Patent 6,990,452).

10. Regarding claim 3, **Hyon** and **Baker** do not explicitly teach a display device comprising:

- A) wherein said text attribute data contains color attribute data indicating at least a fore color of a corresponding standardized character; and
- B) said image transforming means converts a color of said non-standardized image according to said color attribute data.

Ostermann, however, teaches **"wherein said text attribute data contains color attribute data indicating at least a fore color of a corresponding standardized character"** as "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method

may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color" (Column 11, lines 43-50) and **"said image transforming means converts a color of said non-standardized image according to said color attribute data"** as "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color" (Column 11, lines 43-50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Ostermann's** would have allowed **Hyon's** and **Baker's** to provide a method to allow the ability to insert a customized emoticon or specified image by a single button click, as noted by **Ostermann** (Column 3, lines 35-54).

Regarding claim 4, **Hyon** and **Baker** do not explicitly teach a display device comprising:

A) wherein when said non-standardized is a gray image, said image transforming means converts each pixel of said non-standardized image into a color made by mixing the fore color and a back color of said text at a ratio according to a pixel value of said standardized character.

Ostermann, however, teaches **"wherein when said non-standardized is a gray image, said image transforming means converts each pixel of said non-standardized image into a color made by mixing the fore color and a back color of said text at a ratio according to a pixel value of said standardized character"** as "The increased intensity of the emoticon may be accomplished by changing the icon

from black-on-white background to black-on-colored background (such as red or yellow) where the intensity of the background color reflects the amplitude" (Column 9, lines 43-67) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means. For example, the method may comprise providing the sender an option to assign a color to the at least typed one word such that the chosen emoticon begins to be presented by the animated entity to the recipient at the first typed word with the assigned color and the chosen emoticon presentation by the animated entity ends at the last typed word with the assigned color" (Column 11, lines 43-50)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Ostermann's** would have allowed **Hyon's** and **Baker's** to provide a method to allow the ability to insert a customized emoticon or specified image by a single button click, as noted by **Ostermann** (Column 3, lines 35-54).

Regarding claim 5, **Hyon** and **Baker** do not explicitly teach a display device comprising:

- A) wherein said text attribute data contains decoration attribute data indicating a type of a decoration applied to a corresponding standardized character; and
- B) said image transforming means decorates said non-standardized image according to said decoration attribute data.

Ostermann, however, teaches "**wherein said text attribute data contains decoration attribute data indicating a type of a decoration applied to a corresponding standardized character**" as "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means...In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emoticon and presenting the chosen duration of the emoticon" (Column 11, lines 43-61) and "**said image**

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transforming means decorates said non-standardized image according to said decoration attribute data” as “The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means...In this case, in a sentence such as “Hi John, :-) are you pleased that the stock market is up?” the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word “are” and to continue the smile through the word “up”. The method comprises receiving the indicated duration of the emoticon and presenting the chosen duration of the emoticon” (Column 11, lines 43-61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Ostermann’s** would have allowed **Hyon’s** and **Baker’s** to provide a method to allow the ability to insert a customized emoticon or specified image by a single button click, as noted by **Ostermann** (Column 3, lines 35-54).

Regarding claim 9, **Hyon** and **Baker** do not explicitly teach a display device comprising:

A) wherein said transforming means includes image decoration means for decorating said non-standardized image to provide continuous decoration to both said non-standardized image and neighboring standardized characters adjacent to said non-standardized image according to said decoration attribute data.

Ostermann, however, teaches “**wherein said transforming means includes image decoration means for decorating said non-standardized image to provide continuous decoration to both said non-standardized image and neighboring standardized characters adjacent to said non-standardized image according to said decoration attribute data**” as “The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means...In this case, in a sentence such as “Hi John, :-) are you pleased that the stock market is up?” the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word “are” and to continue the smile through the word “up”. The method comprises receiving the indicated duration of the emoticon and presenting the

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chosen duration of the emoticon as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Ostermann's** would have allowed **Hyon's** and **Baker's** to provide a method to allow the ability to insert a customized emoticon or specified image by a single button click, as noted by **Ostermann** (Column 3, lines 35-54).

Regarding claim 10, **Hyon** and **Baker** do not explicitly teach a display device comprising:

A) wherein said image decoration means decorates said non-standardized image, such that both said non-standardized image and said neighboring standardized characters show the said fore and back colors continuously.

Ostermann, however, teaches "**wherein said image decoration means decorates said non-standardized image, such that both said non-standardized image and said neighboring standardized characters show the said fore and back colors continuously**" as The increased intensity of the emoticon may be accomplished by changing the icon from black-on-white background to black-on-colored background (such as red or yellow) where the intensity of the background color reflects the amplitude" (Column 9, lines 43-67) and "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means... In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emoticon and presenting the chosen duration of the emoticon as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Ostermann's** would have allowed **Hyon's** and **Baker's** to provide a method to allow the ability to insert a customized emoticon or specified image by a single button click, as noted by **Ostermann** (Column 3, lines 35-54).

Regarding claim 11, **Hyon** and **Baker** do not explicitly teach a display device comprising:

A) wherein said image decoration means decorates said non-standardized image to draw a continuous underline below both said non-standardized image and said neighboring standardized characters.

Ostermann, however, teaches "wherein said image decoration means decorates said non-standardized image to draw a continuous underline below both said non-standardized image and said neighboring standardized characters" as "The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means...In this case, in a sentence such as "Hi John, :-) are you pleased that the stock market is up?" the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word "are" and to continue the smile through the word "up". The method comprises receiving the indicated duration of the emoticon and presenting the chosen duration of the emoticon as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion" (Column 11, lines 43-61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Ostermann's** would have allowed **Hyon's** and **Baker's** to provide a method to allow the ability to insert a customized emoticon or specified image by a single button click, as noted by **Ostermann** (Column 3, lines 35-54).

Regarding claim 12, **Hyon** and **Baker** do not explicitly teach a display device comprising:

A) wherein said image decoration means decorates said non-standardized image to draw a continuous cancel line on both said non-standardized image and said neighboring standardized characters.

Ostermann, however, teaches “wherein said image decoration means decorates said non-standardized image to draw a continuous cancel line on both said non-standardized image and said neighboring standardized characters” as “The sender can associate typed words with an emoticon by underlining, coloring, highlighting, or by any other means...In this case, in a sentence such as “Hi John, :-) are you pleased that the stock market is up?” the underlining represents the highlighting wherein the sender chooses to begin the smile at the beginning of the word “are” and to continue the smile through the word “up”. The method comprises receiving the indicated duration of the emoticon and presenting the chosen duration of the emoticon as the animated entity delivers the message. As mentioned above, the highlighting can occur through coloring words, underlining words, or some other means of presenting the emotion” (Column 11, lines 43-61).

The examiner notes that it is clear that **Ostermann’s** method can use various computer font techniques to apply to sentences with emoticons, such as underlines and highlighters.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Ostermann’s** would have allowed **Hyon’s** and **Baker’s** to provide a method to allow the ability to insert a customized emoticon or specified image by a single button click, as noted by **Ostermann** (Column 3, lines 35-54).

Response to Arguments

11. Applicant’s arguments filed on 04/27/2007 have been fully considered but they are not persuasive.

Applicant argues on page 09, that “**Hyon states that the user can add hieroglyphics to the basic emoticons by the user directly storing them, receiving**

them form a base station, or downloading them form the Internet. Therefore, these hieroglyphics are standardized characters rather than non-standardized images". However, the examiner wishes to point to paragraph 44 of **Hyon** which states "In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station, and the stores them, or downloads them from the Internet. The user can change and edit the emoticons stored in the mobile terminal" (Paragraph 44). The examiner further wishes to state that it is clear that a user can edit/change/manipulate the downloaded emoticons. Furthermore, the examiner wishes to state that an edited/manipulated emoticon is a non-standardized image since the after-manipulated image is generated by the user.

Applicant argues on page 10, that **"Hyon, however, fails to disclose that the changed and edited emoticons are stored in a storage portion (e.g., the second storage portion (such as RAM)) different from a storage portion (e.g., the first storage portion (such as a ROM)) that stores the standardized emoticons"**. However, the examiner wishes to point to paragraphs 23, 25, and 44 of **Hyon** which state "A storage 18 is comprised of a ROM (Read Only Memory) and a RAM (Random Access Memory) for storing programs and data, and a voice memory. The storage 18 stores an operation program for inputting emoticons and a plurality of emoticons in the form of a bit map according to the embodiment of the present invention. The plurality of emoticons are stored by groups in the storage 18 to facilitate selection of emoticons" (Paragraph 23), "storage 18 stores oriental or occidental emoticons according to the cultural area of a user" (Paragraph 25), and "A plurality of emoticons are pre-stored in a mobile terminal so that a user easily select an intended emoticon in the present invention. In another embodiment, the user can add hieroglyphics to basic emoticons stored by a manufacturer. The hieroglyphics can be stored in three ways: the user directly stores them, receives them from a base station and the stores them, or downloads them from the Internet. The user can change and edit the emoticons stored in the mobile terminal" (Paragraph 44). The examiner further notes that it is clear that the emoticons which are edited, changed, and user-generated must be stored in the

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RAM of storage 18 since items stored in RAM can be written to whereas items stored in ROM cannot be written (i.e. are Read-Only). The examiner further notes that items which are clearly not edited/changed/manipulated (i.e. text characters) would be stored in ROM of storage 18. Moreover, the examiner further wishes to state that it is well known that text characters from a particular font are stored in ROM and not RAM (see cited reference of **Hersum** (see column 4, lines 55-67 for reference).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,987,991 by **Nelson** on 17 January 2006. The subject matter disclosed therein is pertinent to that of claims 1-13 (e.g., methods automatically scale graphics into a text sentence that is sent to another user).

U.S. PGPUB 2002/0120653 by **Kraft et al.** on 29 August 2002. The subject matter disclosed therein is pertinent to that of claims 1-13 (e.g., methods automatically scale graphics into a text sentence that is sent to another user).

U.S. Patent 6,584,479 by **Chang et al.** on 24 June 2003. The subject matter disclosed therein is pertinent to that of claims 1-13 (e.g., methods automatically scale graphics into a text sentence that is sent to another user).

U.S. Patent 6,456,305 by **Qureshi et al.** on 24 September 2002. The subject matter disclosed therein is pertinent to that of claims 1-13 (e.g., methods automatically scale graphics into a text sentence that is sent to another user).

U.S. Patent 5,301,106 by **Hersum** on 05 April 1994. The subject matter disclosed therein is pertinent to that of claims 1-13 (e.g., methods automatically scale graphics into a text sentence that is sent to another user).

Contact Information


13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahesh Dwivedi whose telephone number is (571) 272-2731. The examiner can normally be reached on Monday to Friday 8:20 am – 4:40 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached (571) 272-3642. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mahesh Dwivedi
Patent Examiner
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August 07, 2001


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